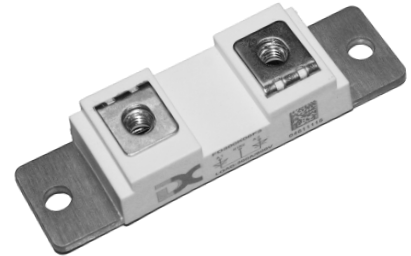


## Fast Recover Diode Module

### Features

- Fast Recovery,  $t_{rr}= 62ns$
- Operating Temperature 150 °C
- Reverse Voltage 600V
- Avalanche Energy Rated



### Mechanical Data

- **Case:** F3 (plastic package).  
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**  
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:  
260 °C/10 sec. at terminals

### Applications

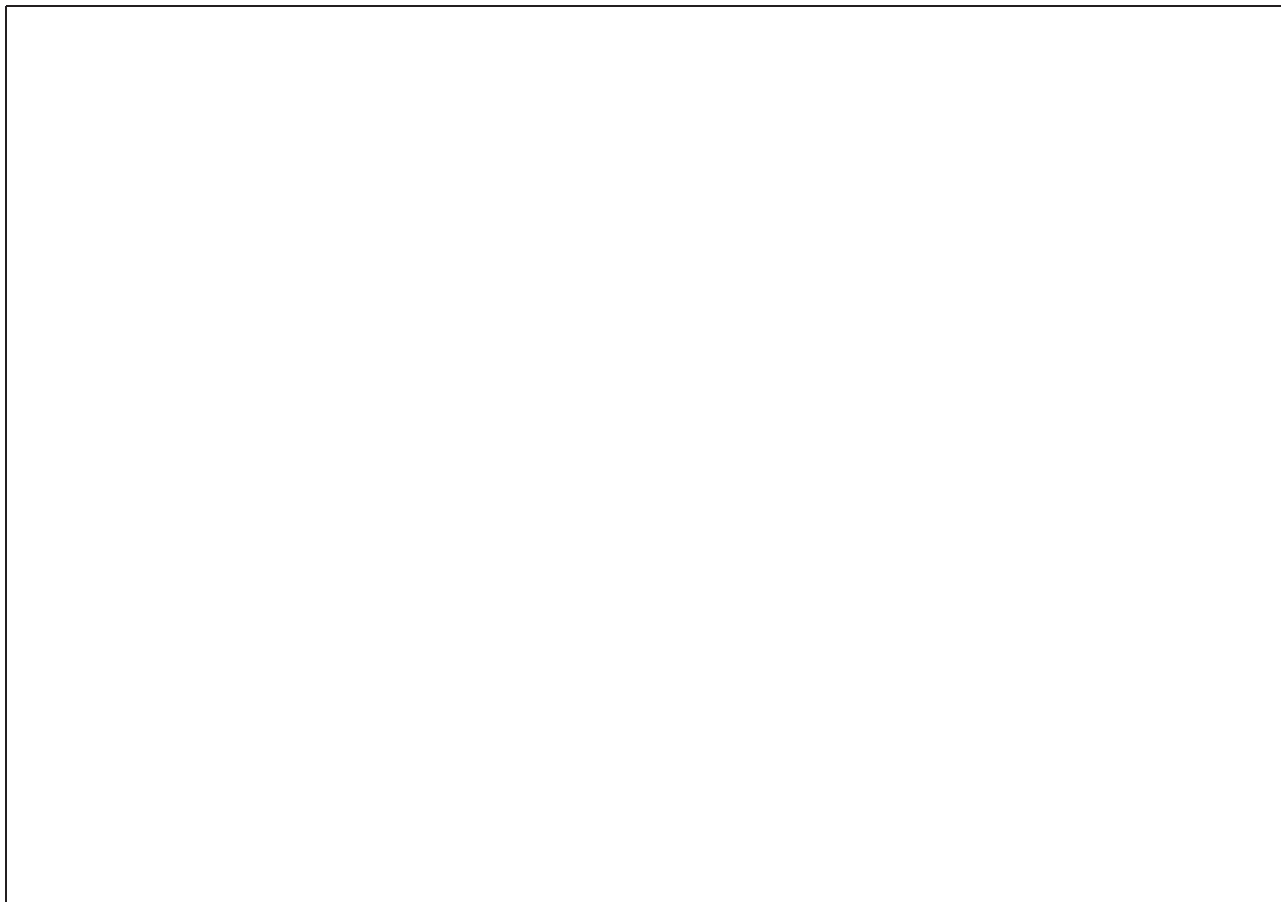
- Switch Mode Power Supplies
- Hard Switched PFC Boost Diode
- UPS Free Wheeling Diode
- Motor Drive FWD
- SMPS FWD

### Absolute Maximum Ratings

Symbol	Parameter	Value	Units
$V_{RRM}$	Peak Repetitive Reverse Voltage	600	V
$I_{F(AV)}$	Diode Continuous Forward Current ( $T_C=100^{\circ}C$ )	300	A
$I_{FRM}$	Repetitive Peak Surge Current (20kHz Square Wave)	600	A
$I_{FSM}$	Nonrepetitive Peak Surge Current for Per Diode (Halfwave 1 Phase 50Hz)	3000	A
$T_J$	Operating Junction Temperature Range	-55 to +150	°C
$T_{STG}$	Storage Temperature Range	-55 to +150	°C

### Electrical Specifications ( $T_J = 25^{\circ}C$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Units
$V_R$	Cathode to Anode Breakdown Voltage	$I_R = 100\mu A$	600			
$V_F$	Diode Forward Voltage	$I_F=150A T_C=25^{\circ}C$		1.20	1.40	V
	Diode Forward Voltage	$I_F=150A T_C=125^{\circ}C$		1.05		V
$I_{RM}$	Maximum Reverse Leakage Current	$V_R=600V T_C=25^{\circ}C$			100	$\mu A$
		$V_R=600V T_C=125^{\circ}C$			1	mA

**Package Dimensions****Ordering information**

Order code	Package	Packaging option	Base quantity	Packaging specification
FD300K06F3	F3	BOX	50pcs / BOX	

**Revision history**

Date	Revision	Changes
23-May-2016	1.0	Initial release

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